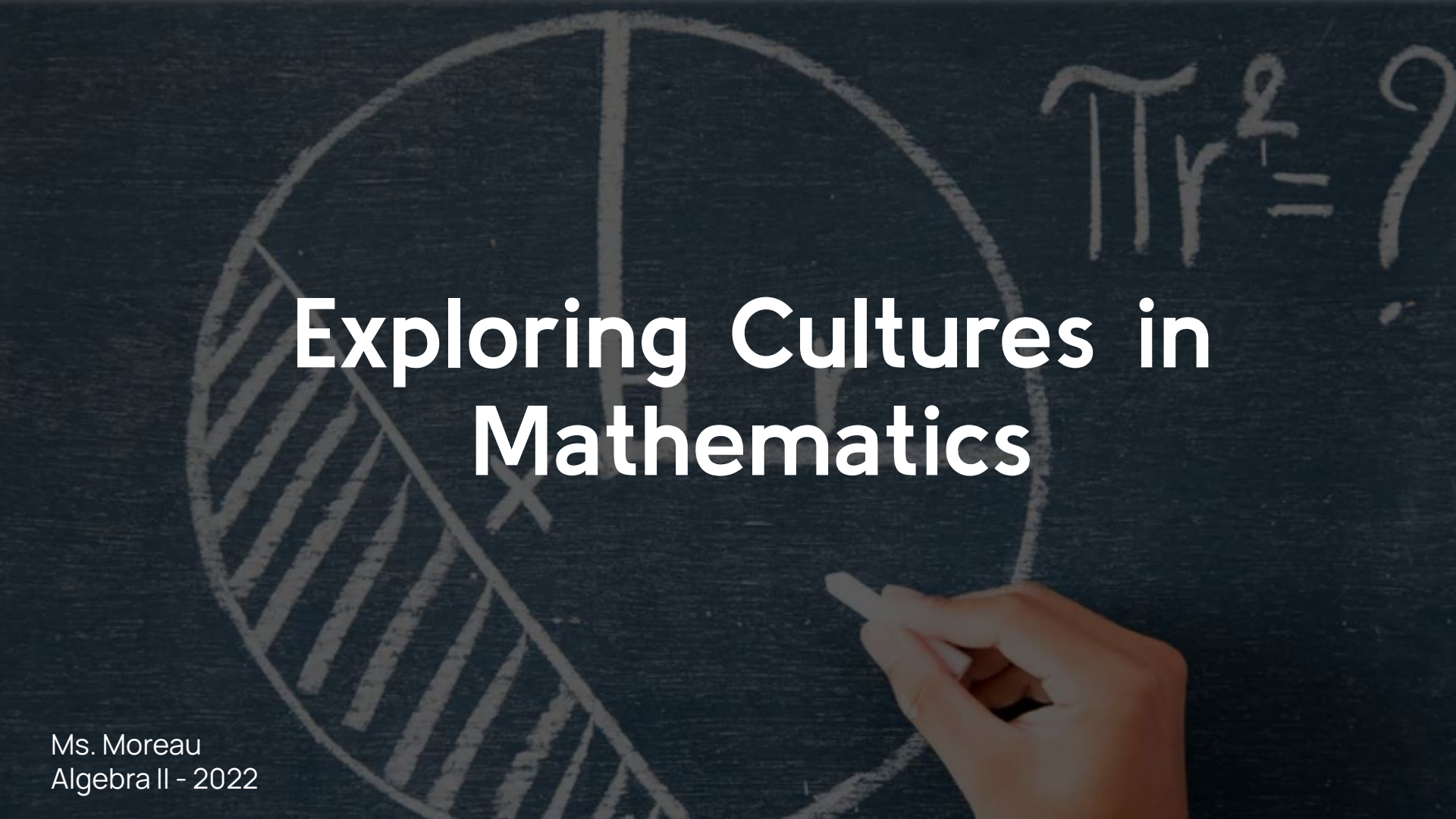
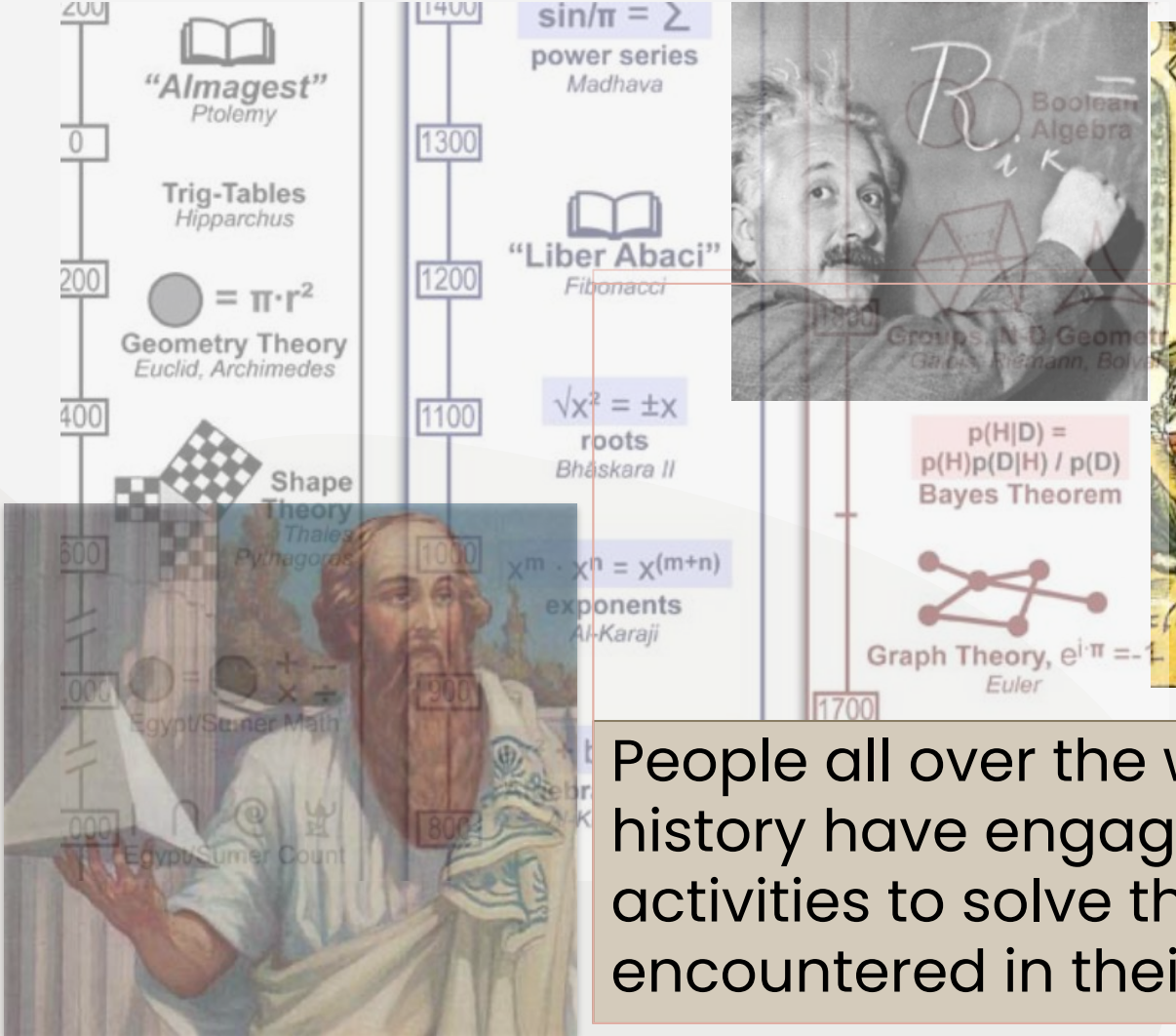


Ms. Moreau
Algebra II - 2022



People all over the world and in all eras of history have engaged in mathematical activities to solve the problems that they encountered in their lives.

The new term *ethnomathematics* expresses the relationship between mathematics and culture (D'Ambrosio, 2001), and a growing body of literature gives guidance to teachers on introducing cultural perspectives into the math curriculum.

Figure 1. The Ancient Egyptian Hieroglyphic Numeral for 1, 248

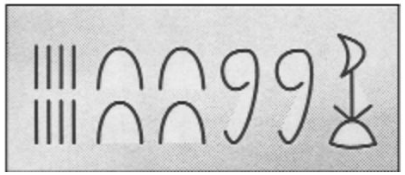


Figure 2. Ancient Chinese Rod Numerals

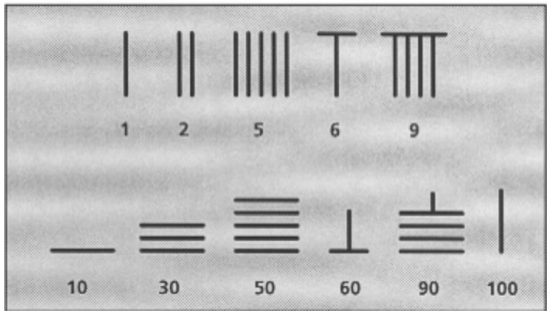
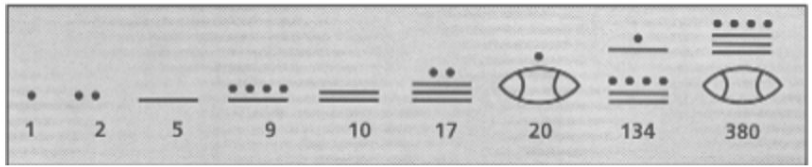


Figure 3. Ancient Mayan Numerals



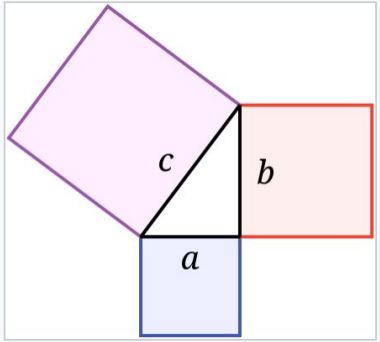
https://www.ascd.org/el/articles/exploring-world-cultures-in-math-class

BABYLON

Geometry problem on a clay tablet belonging to a school for scribes; Susa, first half of the 2nd millennium BCE

Babylonians used a base-60 number system. 60 seconds in a minute, 60 minutes in an hour, 360 degrees in a circle.

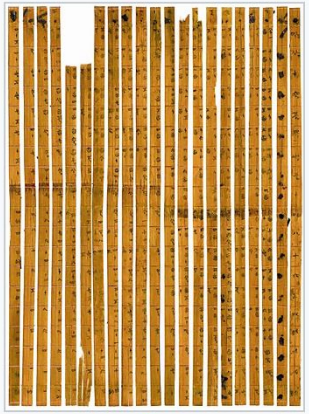
GREECE



The Pythagorean theorem. The Pythagoreans are generally credited with the first proof of the theorem.

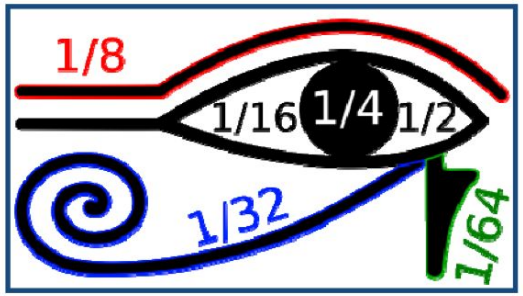
Pythagoras used logic to develop the proof of existence of irrational numbers. Euclid and Plato made contributions to Greek mathematics.

CHINA



The Tsinghua Bamboo Slips, containing the world's earliest decimal multiplication table, dated 305 BC during the Warring States period

Higher order algebraic expressions, the square root, pi, Calvaleiri's principle and the very first study of decimals

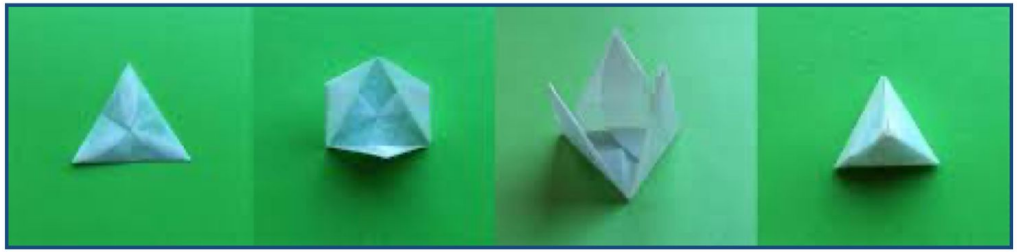


The Eye of Horus – Egyptian notation for measures of capacity

Audio frequencies can be explored through the use of an African mbira (thumb piano)

The pyramids of Egypt and many other religious buildings were created through mathematic principles discovered by ancient Egyptians.

Not surprisingly, math is found nearly everywhere one looks.



Tetrahedron, as explored through Japanese Origami

Ethnomathematics refers to the way that members of various cultural groups mathematize their own reality because it examines how both mathematical ideas and practices are processed and used in daily activities.

Assignment Example

Ethnomathematics Assignment

Your name
Ms. Moreau

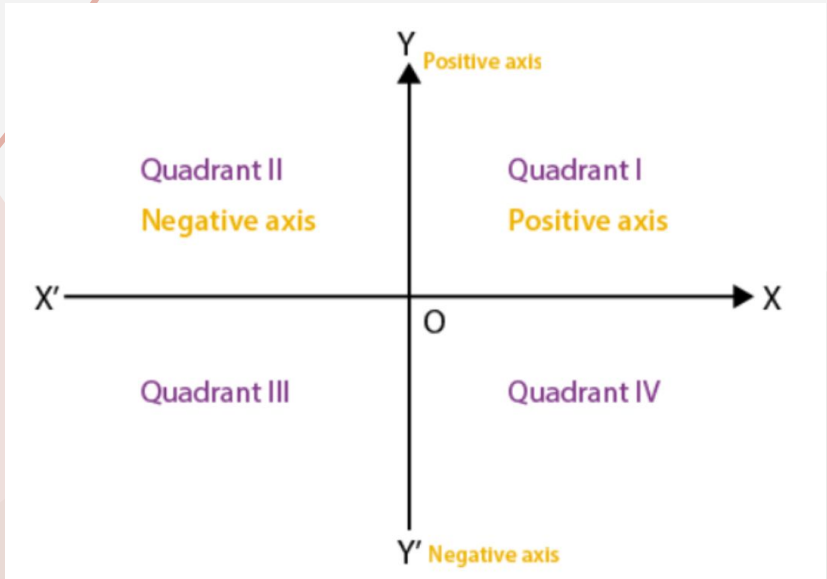
René Déscartes : French Mathematician

(1596 - 1650)

He developed rules for deductive reasoning, developed a system for using letters as mathematical variables, and discovered how to plot points on a Cartesian plane.

The Cartesian plane is a plane with a rectangular coordinate system that associates each point in the plane with a pair of numbers.

Used to locate a point in space.



The Cartesian coordinate plane is a plane that we use to plot points in **Algebra** in reference to the xy axis. This is a current topic used every day in mathematics classes and in real-world situations. For example, we use this to graph a line.

Other applications of this French discovery in real world situations:

The location of a city, country, or a ship at sea is given by a set of coordinates

Ordered pairs are used when computer graphic artists create figures and computer animations by referring to coordinates.

Reference:
https://www.cuemath.com/learn/rene-descartes/

references

https://kb.osu.edu/bitstream/handle/1811/78917/OJSM_71_Spring2015_31.pdf